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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,453	07/12/2005	Martine Mayne	13777-37	7851
45473	7590	01/14/2009	EXAMINER	
BRINKS, HOFER, GILSON & LIONE			MCCRACKEN, DANIEL	
P.O. BOX 1340			ART UNIT	PAPER NUMBER
MORRISVILLE, NC 27560			1793	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,453	Applicant(s) MAYNE ET AL.
	Examiner DANIEL C. MCCRACKEN	Art Unit 1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 10/9/2008.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-44 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-44 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/9/2008

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application
6) Other: _____

DETAILED ACTION

Citation to the Specification will be in the following format: (S. # : ¶/L) where # denotes the page number and ¶/L denotes the paragraph number or line number. Citation to patent literature will be in the form (Inventor # : LL) where # is the column number and LL is the line number. Citation to the pre-grant publication literature will be in the following format (Inventor # : ¶) where # denotes the page number and ¶ denotes the paragraph number.

Response to Arguments, Remarks

Information Disclosure Statement

A signed IDS accompanies this office action to reflect the complete documents submitted to the Office.

Claim Rejections – 35 U.S.C. §112

Applicants amendment to Claim 30 obviates *that* rejection. Accordingly, *that* rejection is WITHDRAWN. With respect to Claims 2-3, Applicants would seem to urge that because the same language is repeated in the specification at *e.g.* (S. 12: 17-26), the claim must be definite. Whether something is definite or not is more than an *ipsissima verba* test (i.e. are the words in the specification?); rather, it is an inquiry into whether the skilled artisan would understand the (allegedly) offending language in light of the disclosure. Here, the portion relied upon by Applicants fails. While there are no *per se* rules (and the Examiner is *not* applying one), the addition of the words “type” or “like” to a word (or in this case, a string of words) to make a new adjective is a close to *per se* indefinite as you can get.

Using the Examiner's example of the injector in a carbon black reactor, Applicants traverse by alleging “[a] carbon black reactor is not an automobile heat injection system . . . thus the person of ordinary skill would not think that the injection system of claims 2 and 3 could possibly be a carbon black reactor.” As an initial matter, this misstates the office action, which posited whether these are “of the same type?” Note that Applicants are not claiming an “automobile heat injection system,” they are claiming an “automobile heat engine injector *type* [injection system].” (emphasis added). What does this mean? Second, whose to say they are different? They both inject liquids into reactors (be they giant carbon black furnaces or a 4-cylinder engine for an economy sized sedan). That is the point: the specification is without guidance. Where is the line between “automobile heat engine injector systems,” “almost-but-not-quite-automobile-heat-engine-injector-systems,” “definitely-not-an-automobile-heat-engine-injection-type-system,” and “totally, without doubt, an automobile-heat-injection-type-system.” If this ambiguity is the result of a translation error, Applicants should resolve this and bring it to the attention of the Examiner. The Examiner does not read/speak French.

Claim Rejections – 35 U.S.C. §102

With respect to the rejection of the claims as anticipated by Mayne, after a lengthy prologue, Applicants traversal is on the grounds that “Mayne fails to disclose a fundamental element of the instant claims – the periodic injection system.” As an initial matter, this feature was *not* claimed in Claim 1 as filed and is only now present in Claim 1 and dependent claims. Such a limitation (“periodic injection system”) would seem to imply an injector that can operate in a periodic manner. “On” and “off” is operating in a periodic manner, if only one period. No

difference between the *claims* and the “compressed-gas-driven gas atomizer” is seen. The rejection is MAINTAINED.

With respect to the rejection of the claims as anticipated by Kamalakaran, Applicants traversal is on the grounds that “the spray system of Kamalakaran does not make it possible to generate large liquid delivery rates or to independently control the carrier gas delivery rate,” etc. (Remarks of 10/9/2008 at 11). The claims do not require these acts. Applicants recite arguments similar to those made with respect to Mayne. Similar rebuttal arguments apply: “on” and “off” is a period, therefore Kamalakaran teaches a “periodic injection system.” The rejection is MAINTAINED.

With respect to the rejection of the claims as anticipated by Terrones, Applicants traversal is on the grounds that “the spray system of Terrones does not make it possible to generate large liquid delivery rates,” etc. (Remarks of 10/9/2008 at 12). The claims do not require these acts. Applicants recite arguments similar to those made with respect to Mayne. Similar rebuttal arguments apply: “on” and “off” is a period, therefore Terrones teaches a “periodic injection system.” The rejection is MAINTAINED.

Claim Rejections – 35 U.S.C. §103

As Applicants traverse the rejections in masse, the Examiner shall respond in masse. Applicants rely on their arguments with respect to the rejections under 35 U.S.C. 102, namely that the prior art allegedly fails to teach a “periodic” injection system. As noted above, “on” and “off” is a period. The remainder of Applicants arguments are against the references individually, reciting a list of the alleged teachings of the prior art with no mention as to the claims rejected or

the rejection itself. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Official notice was taken in the non-final office action, to which Applicants “are not agreeing with.” (Remarks of 10/9/2008 at 17). Not agreeing with something is not the same as traversing something. As such, the teachings are taken as “common knowledge” and admitted prior art. *See* MPEP 2144.03 C.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection as set forth in the non-final office action dated 4/11/2008 and the remarks above are incorporated herein by reference.

Claim Rejections - 35 USC §§ 102-103

The rejections as set forth in the non-final office action dated 4/11/2008 are expressly incorporated herein by reference.

Conclusion

Whatever advancement Applicants feel they have made over the prior spray pyrolysis methods, it needs to be in the claims. Applicants either need to find a different way to describe this "periodic injection system" or recite steps that it performs that the other injection systems don't. All amendments made in response to this Office Action must be accompanied by a pinpoint citation to the Specification (i.e. page and paragraph or line number) to indicate where Applicants are drawing their support.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL C. MCCRACKEN whose telephone number is (571)272-6537. The examiner can normally be reached on Monday through Friday, 9 AM - 6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on (571) 272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel C. McCracken/
Daniel C. McCracken
Examiner, Art Unit 1793
DCM

/Edward M. Johnson/
Edward M. Johnson
Primary Examiner